eCall
Business Messaging

TCP/IP access
Description

Content

1. Introduction

This document describes the TCP/IP access of eCall. With the Transmission Control Protocol / Internet Protocol (TCP/IP) access from eCall, you can send messages to various call systems using the TCP/IP protocol.

Structure of the document:

- Requirements
- Protocol
- Message Formats
- Connection Data
- Identification
- Access Test

2. Requirements

The following requirements are necessary in order to send messages using TCP/IP:

- You must have a Business account with eCall.
- Access via TCP/IP must be set up in your Business account.
- Your software must be able to send messages using a TCP/IP connection.

3. Protocol

The processing of a transmission order to eCall requires up to four stages.

1. The client sends the transmission order to eCall.
2. eCall sends a result message to the client.
3. eCall sends notification to the client, if requested.
4. eCall sends a mobile phone recipient's return reply, if requested.

4. Message Formats

All messages consist of a command word and a parameter list. The specific elements of a message are separated from each other by tabs. Parameter ID and Value are separated by a colon. The order is completed with CR LF. The Parameter IDs are case insensitive, i.e. it does not matter if you use upper or lower case letters.

General Format

[Command]<TAB>[Parameter ID 1]:[Parameter Value 1]<TAB>[Parameter ID 2]:[Parameter Value 2]...<CR><LF>

4.1 Transmission Order for Text Messages

Command

SendPage   Command for a text message.

Must Parameter

Address   Complete pager or mobile phone number (internat. format),

or a list of numbers divided by a semicolon,

or a name of a person or a group specified in the address book of the eCall
account.

Message   Text to be displayed on the pager/mobile phone, cannot contain any tabs.

CrLfs must be replaced with the <CR> und <LF> characters.

Optional Parameter

JobID   Definite identification of the message.

AccountName   Name of the eCall business account.

AccountPassword   Password for the eCall business account.

Expanded Functions

CallBack   Callback number only applicable for mobile phones, up to 16 numerical or up
to 11 alphanumerical characters possible.

You cannot use a business number as a callback number!

Answer   Answer function with eCall (mobile phone or pager number, e-mail or IP
address, " " in the logbook) only applicable for mobile phones.

Note: If the "Answer" parameter is transmitted, then the "Callback" value is
ignored. Format for an Answer Message described in section 4.7.

Notification	For forwarding the send states you can define receiver addresses: - by SMS to a mobile number (i.e.: „0041791234567") - by e-mail to an e-mail-address (i.e.: „hans.muster@mycompany.ch") - by socket to a IP/Port (i.e.: „193.93.208.151/12345") - by HTTP(S)-request (i.e.: „http:/www.mycompany.ch/notifcations.asp") - Write to log only (i.e. „") empty value You can combine different addresses. Just use a semicolon « ; » as a separator. i.e.: „0041791234567;0041781234567;hans.muster@mycompany.ch" Notification (or AlwaysNotification) format is described in section 4.10. Attention: Validity area of Notification(or AlwaysNotification) ports up to 32767.
AlwaysNotification	Receiving address for notification, as soon as something has changed in the notification status (pager or mobile phone). Note: If the "AlwaysNotification" parameter is transmitted, the "notification" parameter is not needed.
SendDate	Determines the sending time of the order, in the case of delayed sending (yyyy-mm-dd hh:mm:ss).
MsgType	Delivery option for a specific type of message. Defined types are: • Flash -> Flash-SMS • PrioSMS+ -> PrioSMS+
NoLog	With this parameter delivery, the message will not be written in the logbook.

Example

SendPage<TAB>Address:+41791112233<TAB>Message:Hello World<TAB>AccountName:xxx<TAB> AccountPassword:yyy<CR><LF>

SendPage<TAB>Address:+41791112233<TAB>Message:Hello World<TAB>AccountName:xxx<TAB>AccountPassword:yyy<TAB>AllwaysNotification:name@domain .ch<TAB>Answer:name@domain.ch<CR><LF>

SendPage<TAB>Address:+41791112233<TAB>Message:Hello World<TAB>AccountName:xxx<TAB>AccountPassword:yyy<TAB>CallBack:+41791234567<TAB>No tification:192.168.0.56/15300<TAB>SendDate:2004-12-20 20:31:50<TAB>JobID:123AB<CR><LF>

SendPage<TAB>Address:+41791112233<TAB>Message:Hello
World<TAB>AccountName:xxx<TAB>AccountPassword:yyy<TAB>MsgType:Flash<TAB>NoLog<CR>
<LF>

> Note: The contents of notification or a reply to a mobile phone, pager, or an e-mail address are restricted to the status of notification or the reply of the recipient. An exception is the JobID, if this parameter was used, in which case it will be inserted at the end of an e-mail text.

4.2 Transmission Order for Fax Messages

Command

SendFax	Command for a fax message.

Must Parameter

Address	Complete fax number (internat. format), or a list of numbers divided by a semicolon, or a name of a person or a group specified in the address book of the eCall account.
Message	Fax message text, cannot contain any tabs. CrLfs must be replaced with the <CR> and <LF> characters.

Optional Parameter

JobID	Definite message identification.
AccountName	Name of the eCall Business account.
AccountPassword	Password for the eCall Business account.

Expanded Functions

CallingNumber	Sender number.
Subject	Subject.

FaxHeaderID   Sender in fax header.

FaxHeaderInfo   Info in fax header.

SendDate   Determines the sending time of the order, in the case of delayed sending
                           (yyyy-mm-dd hh:mm:ss).

MaxRetries   Number of retries.

RetriesTimeIntervalInMin   Delay between retries.

NoCoversheet   Use no coversheet.

Example

SendFax<TAB>Address:+41447873071<TAB>Subject:Hello World!<TAB>Message:Testmessage
<CR><LF>

SendFax<TAB>Address:+41447873071<TAB>Subject:Test<TAB>Message:Testmessage<TAB>Acco
untName:xxx<TAB>AccountPassword:yyy<TAB>FromText:0041431234576<TAB>SendDate:2009-
12-20 20:50<TAB>JobID:123AB<CR><LF>

4.3 Transmission Order for Voice Messages

Command

SendVoice   Command for a voice message.

Must Parameter

Address   Complete number (internat. format).

Message   Fax message text, cannot contain any tabs. CrLfs must be replaced with the
                             <CR> und <LF> characters.

Optional Parameter

JobID   Definite message identification.

AccountName   Name of the eCall Business account.

AccountPassword   Password for the eCall Business account.

Expanded Functions

MessageLanguage   Determines the language in which the text is read out. The language
                             parameters are as follows: German=DE, French=FR, Italian=IT, English=EN.
                             Default: Language is automatically recognized.

FromText   Contains the client's name, which is read out before the message.

SendDate   Determines the sending time of the order, in the case of delayed sending
                             (yyyy-mm-dd hh:mm:ss).

Example

SendVoice<TAB>Address:+41447873070<TAB>FromText:Sample John<TAB>Message:Test
Message <CR><LF>

SendVoice<TAB>Address:+41447873070<TAB>FromText:John
Doe<TAB>Message:Testmessage<TAB>AccountName:xxx<TAB>AccountPassword:yyy<TAB>Mess
ageLanguage:FR<TAB>SendDate:2009-12-20 20:50<TAB>JobID:123AB<CR><LF>

4.4 Message Status Request

Command

GetState   Command for a status request.

Must parameter

JobID   Message identification of the send request.

Optional parameter

Address   Receiver address (internat. format). Format: international numbering format (+41791234567). This parameter should be supplied if the send request address was a number list or a group defined in eCall. If the address is not given in such a case, you'll receive the state of the last job within the Job ID.

AccountName   Name of your eCall account.

AccountPassword   Password of your eCall account.

4.5 Response Message Request

In order to be able to take advantage of this function, the send request for the message has to be created with an empty „Answer"-Parameter, which means response into the logbook.

Command

GetAnswer   Command for getting the answer

Must parameter

JobID   Job identification of the Send request

Optional parameter

Address   Receiver address (internat. format). This parameter should be supplied if the send request address was a number list or a group defined in eCall. If the address is not given in such a case, you'll receive the last job within answer with this Job ID.

AccountName   Name of your eCall account.

AccountPassword   Password of your eCall account.

4.6 Result Message for Send Requests

Command

ResultPage   Command for a result message.

Must Parameter

ResultCode   Result code (according to paragraph error codes).

ResultText   Result in cleartext (according to paragraph error codes).

Optional Parameter

JobID   Definite message identification, if it was included in the transmission order.

Example

ResultPage<TAB>ResultCode:0<TAB>ResultText:Page Accept<CR><LF>

Note: The result message only shows that the transmission order was accepted by eCall. It does not say whether or not the order was successfully transmitted to the appropriate call center or to the recipient.

4.7 Result Message for Status Requests

Command

ResultPage   Command for a result message.

Must parameter

ResultCode   Result code according to the table „Error Codes".

ResultText   Result in plain text according to the table „Error Codes".

Optional Parameter

JobID   Identification of the message.

Address   Receiver address (internat. format).

JobType   Jobtype according to table "Job types".

SendState   Send state of the job according to table "Send States".

ErrorState   Error state of the job according to table "Error States.

PointsUsed   Number of points used for the message.

FinishDate   Finish date of the send request (yyyy-mm-dd hh:mm:ss).

Examples

a) when a job was found:

ResultPage<TAB>ResultCode:0<TAB>ResultText:OK<TAB>JobID:abcdef<TAB>JobID:abcde
Address:+41791234567<TAB>JobType:6<TAB>SendState:44<TAB>ErrorState:0<TAB>PointsUsed:3
<TAB>FinishDate:2006-10-30-08:55:28<CR><LF>

b) when no job was found:

ResultPage<TAB>ResultCode:11912<TAB>ResultText:JobID not found:abcdef<CR><LF>

4.8 Result for a Response Message request

Command

ResultPage   Command for a result message.

Must parameter

ResultCode   Result code according to the table „Error Codes".

ResultText   Result in plain text according to the table „Error Codes".

Optional Parameter

JobID   Identification of the message.

FromAddress   Sender address (internat. format).

JobType   Jobtype according to table "Job types".

AnswerState   Response state according to table „Response types".

AnswerMessage   Response Message.

FinishDate   Finish date of the response (yyyy-mm-dd hh:mm:ss).

Examples

a) when an Answer message was found:

ResultPage<TAB>ResultCode:0<TAB>ResultText:OK<TAB>JobID:IPTESTANSWER<TAB>FromAddr
ess:+41791234567<TAB>JobType:0<TAB>AnswerState:2<TAB>AnswerMessage:Answer from
ABC<TAB>FinishDate:2006-11-22 08:59:06<CR><LF>

b) when no answer message was found:

ResultPage<TAB>ResultCode:11912<TAB>ResultText:JobID not found:abcdef<CR><LF>

4.9 Notification Message

Command

Notification   Command for a notification message.

Must Parameter

NotificationCode   Message status code (according to Notification Table).

NotificationText Status in cleartext (according to Notification Table).

Number   Contains the notification recipient's number.

TimeStamp   Contains the time of receipt of a sent message (dd.mm.yyyy hh:mm:ss).

Read Confirmation

OK<ETX>   In order for us to note the notification message as forwarded, you have to
                                reply to the message receipt with OK<ETX>. The connection to us will then be
                                terminated.

Optional Parameter

JobID   Contains the definite message identification, if it was included in the
                                transmission order.

Example

Notification<TAB> NotificationCode:0<TAB> NotificationText:Message has been delivered
<TAB>TimeStamp:18.09.2000 12:15:45<CR><LF>

Notification Label

NotificationCode	NotificationText	Description
0	Message has been delivered	The recipient confirmed the receipt of the forwarded message.
1	Message has been buffered	Receipt of the forwarded message could not be confirmed yet.
2	Message has not been been delivered	Receipt of the forwarded message could not be confirmed.
3	Error Code / Error Message	Determines the error at transmission to the appropriate center.
4	Transmission OK	The transmission order was forwarded to the appropriate center.

4.10 Answer Message

Command

Answer   Command for an answer message.

Must Parameter

Message   Shows the message that we received.

Number   Shows the sender number of this reply (internat. format).

TimeStamp   Shows the time of receipt of the sent message (dd.mm.yyyy hh:mm:ss).

Read Confirmation

OK<ETX>   In order for us to note the answer message as forwarded, you have to reply to
                        the message receipt with OK<ETX>. The connection to us will then be
                        terminated.

Optional Parameter

JobID   Shows the definite identification of the sent message, if it was included in the
                        transmission order.

Example

Answer<TAB>Message:Time is OK. Say Hi to John<TAB>Number:+41791112233
<TAB>TimeStamp:18.09.2000 12:15:45<CR><LF>

Note: For each response message a read receipt is requested. If this receipt is not transmitted, the
request will be retransmitted.

4.11 SMS Incoming Message

Command

IncomingSMS   Command for a SMS incoming message.

Must Parameter

Message   Shows the message that we received.

AddressTo   Shows the receiver number of this message (internat. format).

AddressFrom   Shows the sender number of this message (internat. format).

TimeStamp   Shows the time of receipt of the sent message (dd.mm.yyyy hh:mm:ss).

Read Confirmation

OK<ETX>   In order for us to note the SMS incoming message as forwarded, you have to reply to the message receipt with OK<ETX>. The connection to us will then be terminated.

Example

IncomingSMS<TAB>Message: Time is OK. Say Hi to John<TAB> AddressFrom:+41791112233 <TAB>AddressTo:+41763332020<TAB>TimeStamp:18.09.2007 12:15:45<CR><LF>

Note: For each incoming message a read receipt is requested. If this receipt is not transmitted, the request will be retransmitted.

5. Connection Data

5.1 IP Addresses for Send Requests (Client → eCall)

Primary Access

Host: tcp.ecall.ch (193.93.208.139)

Port: 2711

In either case, the connection will be closed again 60 seconds after connection establishment.

5.2 IP Address of Answers or Incomings (eCall → Client)

Source IP-addresses: 193.93.208.200

                       193.93.208.149

                       193.93.208.153

Source-Port: undefined (open; 0 till 65535)

Destination-IP: freely definable

Destination-Port: freely definable

Format for transfer: 192.168.0.1/1234

6. Identification

eCall only accepts orders if the sender can be identified. The following criteria can selectively be used in order to identify the sender:

- IP address of sender
- IP address and IP port of sender
- Account name and password

These criteria can, as a matter of course, also be combined. Please contact us for further identification possibilities.

7. Access Test

You can use TELNET, for example, in order to conduct a simple access test. Please note the requirements for access use. In addition, you need to know if the account name and the account password are necessary for identification.

A)   Open a text editor (e.g. Notepad) and write an order (Tabs between the parameters, end with Return), e.g.:
SendPage   Address:+41791112233   Message:Test via eCall
AccountName:CompanyXY   AccountPassword:123456

B)   Mark the text, including the blank line that follows.

C)   Choose "Copy" in the menu.

D)   Start-up Telnet (with START -> Run -> telnet).

E)   Choose "Connect" – Remote System in the Telnet menu.

F)   Specify the hostname: tcp.ecall.ch and port: 2711-> Connect.

G)   Choose "Edit" -> "Paste" in the menu.

You should now receive a result message from eCall.

Appendix-Tables

Job-Type

Number	Description
1	SMS or pager-message
2	Mail-message
3	IP-message
4	Delete request
5	Voice-message
6	Fax-message
7	Picture
8	Logo
9	Ringtone
10	MMS-message

Answer-state

Number	Description
1	Waiting for answer
2	Answer received
3	Holding time for answer expired
4	SMS answer to eCall not possible
5	SMS received

Send state

Type	No.	Description
SMS / Pager	0	Transmitting
	1	Transmission OK
	2	Error
	3	The error detail can be found in the field ErrorState, the description in chapter 7.3
	8	Scheduled transmission time
	9	Transmission OK (reception confirmed)
	10	Transmission OK (reception not yet confirmed, waiting to deliver message)
Voice	30	Message is being transferred to voice system.
	31	Message successfully transferred to voice system.
	32	Transfer of message to voice system was not successful.
	33	Message played successfully
	34	Message played successfully and feedback received
	35	Message with invalid phone number.
	36	Message reception confirmed
	37	No connection within defined time range.
	38	Receiver is being called
	39	Receiver could not be reached, retry pending
Fax	101	Job group successfully assigned at gateway
	201	Started converting
	202	Single file converted
	301	Merging documents of fax message
	401	Fax message is being processed
	402	Processing Single Job finished
	501	Processing Job group finished
	41	Fax message successfully transmitted
	42	Error. Details can be found in the Field ErrorState, the description in chapter 7.3
	43	Transmission waiting
	44	Request newly issued

Error state

Type	No.	Description
SMS / Pager	71	No Job accepted message from gateway
	1000	Connection cancelled
	1001	Timeout: The message could not be sent.
	5111	The text is too long
	5112	Invalid call number
	5120	Ziel-Rufnummer ist eine Tonrufnummer: Meldung unzulässig
	5121	Ziel-Rufnummer ist eine Numeriknummer: Unzulässiges Zeichen
	5155	Zu starker Verkehr
	5164	Call system troubled
	5502	Message from provider: Syntax error
	5504	Message from provider: Operation not allowed - Maximum messages for the address exceeded
	5506	Message from provider: ADC invalid
	5509	Invalid call number
Fax	6000	Unknown error
	6002	Error converting the documents
	6004	No response
	6005	Empty order
	6006	Line busy
	6007	Call rejected
	6009	Unknown calling number
	6010	Invalid calling number
	6011	Number changed
	6013	The receiver is not a fax device
	6014	Connection dropped by sender
	6015	Connection dropped by receiver
	6016	Fileformat not supported
	6017	No access to file

Error code

ErrorCode	ErrorText	Description
11000	SyntaxError	Syntax error
11001	PermissionDenied	Access is denied
11100	AdrAdCInvalid	Invalid or incorrect recipient's address
11101	AdrNAdInvalid	Invalid or incorrect confirmation address
11102	AdrAdCMissing	Recipient address missing
11103	AdrNAdMissing	Notification address missing
11104	AdrAdCTooMany	Too many recipient addresses transmitted
11105	AdrAdCNotAllowed	Recipient address is not within defined area
11200	MsgNoCharacters	No message existent
11201	MsgInvalidCharacters	Invalid characters in the message
11202	MsgSendTimeInvalid	Invalid sending time given
11203	MsgSendTimeNotAllowed	Sending time is not within time slot
11204	MsgNoNewMsg	No new incoming message available
11300	AccNoUser	Unknown user
11301	AccNoUnits	Not enough credits in account
11303	AccNoFreeUnits	Not enough free credits in account
11400	CallSystemInvalid	Invalid call system
11401	CallSystemInvalidForUser	Invalid call system for this user
11402	CallSystemNotSupported	Call system is not supported
11403	CallSystemConfused	Call system is temporarily out of order
11500	IDMissing	ID is missing
11501	IDInvalid	ID could not be found
11502	IDDoesNotExist	ID does not exist in the system
11600	StateAlreadyTransmitted	Message already transmitted
11700	DataReadError	Data contents could not be read
11800	CBMsgError	Callback contains a forbidden number or text
11911	JobIDRequired	The status request does not contain a JobID
11912	JobIDNotFound	No job was found with the supplied ID